

CLAIMS

It is claimed that:

- 5 1. A method for mapping multi-lingual(non-English) domain names to existing domain names of an internet network system comprising the steps:
- (a) maintaining a table of English domain names with corresponding multi-lingual (non-English) domain names;
- 10 (b) examining the incoming Domain Name to determine if it is an English Domain Name; if so, sending said English Domain Name to an Internet Domain Name System for resolution on an internet;
- (c) examining the incoming Domain Name to determine if it is a non-English multi-lingual Domain Name; if so, replacing said non-English Domain Name by a known English Domain Name which corresponds to the multi-lingual non-English Domain Name; and wherein said English Domain Name is sent out to an Internet Domain Name System for resolution on an internet;
- 15
2. The method of claim 1 further comprising the step of :
- 20 utilizing the Internet as the internet.
3. The method of claim 1 further comprising the step of:
- utilizing Unicode as the multi-language character set coding system.
- 25 4. The method of claim 1 comprising further the step of:
- utilizing a separate ML-DNS system in parallel with current DNS systems.
- 30

5. The method of claim further comprising the step of:
utilizing a ML-DN string format similar to the existing English DN format,
but with a character set equal to an extended character set which consists of all
the characters in Unicode except for special reserved symbols including "."
and "@".

6. A method for mapping existing (English) domain names of an internet system
to multi-lingual (non-English) domain names comprising the steps of:

- (a) maintaining a table of multi-lingual(non-English) domain names with
corresponding English domain names;
- (b) examining the incoming Domain Name to determine if it is an non-
English multi-lingual Domain Name; if so, sending said Domain Name to
a non-English multi-lingual Internet Domain Name Server for resolution
on an internet;
- (c) examining the incoming Domain Name to determine if it is an English
Domain Name; if so, replacing said English Domain Name by a known
non-English multi-lingual Domain Name wherein said multi-lingual
Domain Name corresponds to the English Domain Name;
- (d) sending said non-English multi-lingual Domain Name to a non-English
multi-lingual Internet Domain Name System for resolution on an internet.

7. The method of claim 6 further comprising the step of:
utilizing the Internet as the internet.

8. The method of claim 6 further comprising the step of:
utilizing Unicode as the multi-language character set coding system.

9. The method of claim 6 comprising further the step of:
utilizing a separate ML-DNS system in parallel with current DNS systems.

10. The method of claim 6 further comprising the step of:

utilizing a ML-DN string format similar to the existing English DN format,
but with a character set equal to an extended character set which consists of all
the characters in Unicode except for special reserved symbols including "."
and "@".

11. A method for mapping multi-lingual (non-English) domain names to
existing domain names of an Internet network system and for mapping existing
domain names of the Internet system to multi-lingual (non-English) domain
names comprising the steps:

- (a) maintaining a table of English domain names with a corresponding multi-lingual(non-English) domain names;
- (b) maintaining a table of multi-lingual (non-English) domain names with corresponding English domain names;
- (c) resolving for an English-required Domain Name portion of an internet,
further comprising the steps of:
 - (i) examining an incoming Domain Name to determine if it is an English Domain Name; if so, sending said English Domain to an Internet Domain Name Server for resolution on the Internet;
 - (ii) examining the incoming Domain Name to determine if it is a non-English multi-lingual Domain Name; wherein said non-English Domain Name is replaced by a known English Domain Name which corresponds to the multi-lingual non-English Domain Name; and wherein said English Domain Name is sent out to an Internet Domain Name System for resolution on the Internet;
- (d) resolving for an a non-English multi-lingual Domain Name-required portion of an internet, further comprising the steps of:
 - (iii) examining the incoming Domain name to determine if it is an non-English multi-lingual Domain Name; wherein said Domain Name is sent out to a non-English multi-lingual Internet Domain Name Server for resolution on an internet;

95

(iv) examining the incoming Domain Name to determine if it is an English Domain Name; if so, replacing said English Domain Name by a known non-English multi-lingual Domain Name wherein said multi-lingual Domain Name corresponds to the English Domain Name;

100

(v) sending said non-English multi-lingual Domain Name to a non-English multi-lingual Internet Domain Name Server for resolution on an internet.

105

12. The method of claim 11 further comprising the step of:
utilizing the Internet as the internet.

13. The method of claim 11 further comprising the step of:
utilizing Unicode as the multi-language character set coding system.

110

14. The method of claim 11 comprising further the step of:
utilizing a separate ML-DNS system in parallel with current DNS systems.

115

15. The method of claim 11 further comprising the step of:
utilizing a ML-DN string format similar to the existing English DN format,
but with a character set equal to an extended character set which consists of
all the characters in Unicode except for special reserved symbols including
“.” and “@”.

120

- 125 16. A method for mapping multi-lingual (non-English) ML-UIDs to existing
UIDs of an internet network email system comprising the steps:
- (a) maintaining a table of English UIDs with corresponding multi-lingual
(non-English) ML-UIDs;
- 130 (b) examining the incoming ML-UID or UID to determine if it is an English
UID; if so, using said English UID directly for email UID resolution;
- (c) examining the incoming ML-UID or UID to determine if it is a non-
English multi-lingual ML-UID; wherein said non-English ML-UID is
replaced by a known English UID which corresponds to the multi-lingual
non-English ML-UID; and wherein said English UID is used directly for
135 email UID resolution.
17. The method of claim 16 further comprising the step of:
utilizing the Internet as the internet.
- 140 18. The method of claims 16 further comprising the step of:
utilizing Unicode as the multi-language character set coding system.
19. The method of claim 16 further comprising the step of:
utilizing an identifying word (ML-word) in the ML-UID string for each
145 language character set; wherein said word is distinct for each different
coding of the same language character set.
20. A method for mapping existing UIDs of an internet system to multi-lingual
(non-English) ML-UIDs comprising the steps of:
- 150 (a) maintaining a table of multi-lingual (non-English) ML-UIDs with
corresponding English UIDs (ML-UID/UID translation/mapping
database);
- (b) examining an incoming ML-UID or UID to determine if it is an multi-
lingual (non-English) ML-UIDs; if so, utilizing said multi-lingual (non-
155 English) ML-UID directly for email ML-UID resolution on an internet;

- (c) examining the incoming UID to determine if it is an English UID; if so, replacing said English UID with a multi-lingual (non-English) ML-UID according to the ML-UID/UID translation/mapping database.

160

- 21. The method of claim 20 further comprising the step of:
utilizing the Internet as an internet.

165

- 22. The method of claims 20 further comprising the step of:
utilizing Unicode as the multi-language character set coding system.

170

- 23. The method of claim 20 further comprising the step of:
utilizing an identifying word (ML-word) in the ML-UID string for each language character set; wherein said word is distinct for each different coding of the same language character set.

175

- 24. A method for mapping multi-lingual (non-English) UIDs to existing UIDs of an internet network email system and for mapping existing UIDs of the Internet email system to multi-lingual (non-English) ML-UIDs comprising the steps of:

180

- (a) maintaining a table of English UID's with corresponding multi-lingual(non-English) ML-UIDs;
- (b) maintaining a table of multi-lingual (non-English) ML-UIDs with corresponding English UID's;
- (c) resolving for an English-required portion of an internet, further comprising the steps of:

185

- (i) examining the incoming ML-UID or UID to determine if it is an English UID; if so, utilizing said English UID directly for email UID resolution;

- 190 (ii) examining the incoming ML-UID or UID to determine if it is a non-English multi-lingual ML-UID; wherein, if so, said non-English ML-UID is replaced by known English ML-UID which corresponds to the multi-lingual non-English ML-UID; and wherein said English UID is used directly for email UID resolution;
- (d) resolving for an a (non-English) multi-lingual ML-UID-required portion of an internet, further comprising the steps of:
- 195 (iii) examining an incoming ML-UID or UID to determine if it is an multi-lingual (non-English) ML-UIDs; if so, utilizing said multi-lingual (non-English) ML-UID directly for email ML-UID resolution on an internet;
- 200 (iv) examining the incoming UID to determine if it is an English UID; if so, replacing said English UID with a multi-lingual (non-English) ML-UID according to the ML-UID/UID translation/mapping database, for resolution on an internet.

205 25. The method of claim 24 further comprising the step of:
utilizing the Internet as an internet.

26. The method of claims 24 further comprising the step of:
utilizing Unicode as the multi-language character set coding system.

210 27. The method of claim 24 further comprising the step of:
utilizing an identifying word (ML-word) in the ML-UID string for each language character set; wherein said word is distinct for each different coding of the same language character set.

215

28. A method for mapping multi-lingual (non-English) ML-URL path names to existing URL path names of an internet network system comprising the steps of:

- (a) maintaining a table of multi-lingual (non-English) ML-URL path names with corresponding English URL;
- (b) examining an incoming ML-URL path name or URL path name to determine if it is an English URL path name; if so, utilizing said English URL path name directly for URL path name resolution on an internet;
- (c) examining the incoming ML-URL path name or URL path name to determine if it is a non-English multi-lingual ML-URL path name; if so, replacing said non-English ML-URL path name by a known English URL path name which corresponds to the multi-lingual non-English ML-URL path name; and wherein said English URL path name is used directly for URL path name resolution on an internet.

29. The method of claim 28 further comprising the step of:
utilizing the Internet as the internet.

30. The method of claims 28 further comprising the step of:
utilizing Unicode as the multi-language character set coding system.

31. The method of claim 28 further comprising the step of:
utilizing an identifying word (ML-word) in the ML-UID string for each language character set; wherein said word is distinct for each different coding of the same language character set.

- 250 32. A method for mapping existing URL path names of an internet system to multi-lingual (non-English) ML-URL path names comprising the steps of:
- (a) maintaining a table of English URL path names with corresponding multi-lingual (non-English) ML-URL path names (ML-URL path name/URL path name translation/mapping database);
- 255 (b) examining an incoming ML-URL or URL path name to determine if it is an non-English multi-lingual ML-URL path name; if so, said ML-URL path name is utilized for ML-URL path name resolution on an internet;
- (c) examining the incoming ML-URL or URL path name to determine if it is an English URL path name; if so, replacing said English URL path name by a non-English ML-URL path name which corresponds to the multi-lingual non-English ML-URL path name; and wherein said non-English ML-URL path name is used directly for path name resolution on an internet.
- 260
- 265 33. The method of claim 32 further comprising the step of: utilizing the Internet as the internet.
34. The method of claim 32 further comprising the step of: utilizing Unicode as the multi-language character set coding system.
- 270 35. A method for mapping multi-lingual (non-English) ML-URL path names to existing URL path names of an internet network system and for mapping existing URL path names of an internet system to multi-lingual (non-English) ML-URL path names comprising the steps of:
- (a) maintaining a table of multi-lingual (non-English) ML-URL path names with corresponding English URL(ML-URL path name/URL path name translation/mapping database);
- 275 (b) maintaining a table of English URL path names with corresponding multi-lingual (non-English) ML-URL path names; (URL path name/ML-URL path name translation/mapping database);

280

(c) resolving for an English-required portion of an internet, further comprising the steps of:

285

(i) examining an incoming ML-URL path name or URL path name to determine if it is an English URL path name; if so, utilizing said English URL path name directly for URL path name resolution on an internet;

290

(ii) examining the incoming ML-URL path name or URL path name to determine if it is a non-English multi-lingual ML-URL path name; if so, replacing said non-English ML-URL path name by a known English URL path name which corresponds to the multi-lingual non-English ML-URL path name; and wherein said English URL path name is used directly for URL path name resolution on an internet.

295

(d) resolving for an a (non-English) multi-lingual ML-UID-required portion of an internet, further comprising the steps of:

300

(iii) examining an incoming ML-URL or URL path name to determine if it is an non-English multi-lingual ML-URL path name; if so, said ML-URL path name is utilized for ML-URL path name resolution on an internet;

305

(iv) examining the incoming ML-URL or URL path name to determine if it is an English URL path name; if so, replacing said English URL path name by a non-English ML-URL path name which corresponds to the multi-lingual non-English ML-URL path name; and wherein said non-English ML-URL path name is used directly for path name resolution on an internet.

310

36. The method of claim 35 further comprising the step of:
utilizing the Internet as the internet.

315

37. The method of claim 35 further comprising the step of:
utilizing Unicode as the multi-language character set coding system.

320

38. The method of using a client-side program to convert different language
character-set coding of the same language to one unique language-
character-set coding for that language.

325

39. A system based on at least one electronic processor and at least one
computer for mapping multi-lingual (non-English) domain names to
existing domain names of an internet network system and for mapping
existing domain names of the Internet system to multi-lingual (non-
English) domain names, comprising:

330

- (a) a table of English domain names with corresponding multi-lingual(non-
English) domain names;
- (e) a table of multi-lingual (non-English) domain names with corresponding
English domain names;
- (c) resolution for an English-required portion of an internet, further
comprising:

335

- (i) an incoming Domain Name, examined to determine if it is an
English Domain Name; if so, said English Domain is resolved on
an Internet Domain Name System;
- (iii) the incoming Domain Name, examined to determine if it is a non-
English multi-lingual Domain Name; wherein, replacement of said

340

non-English Domain Name is by an English Domain Name which
corresponds to the multi-lingual non-English Domain Name; and
said English Domain Name is resolved by an existing Internet
Domain Name System on the Internet;

(d) resolution for an a non-English required portion of an internet, further
comprising:

(iv) the incoming Domain name, examined to determine if it is an non-
English multi-lingual Domain Name; wherein, if so, said Domain
Name is resolved by an existing non-English multi-lingual Internet
Domain Name System on the Internet;

(v) the incoming Domain Name, examined to determine if it is an
English Domain Name; wherein, if so, said English Domain Name
is replaced by a non-English multi-lingual Domain Name by the
corresponding to the English Domain Name; wherein said non-
English multi-lingual Domain Name is resolved by a non-English
multi-lingual Internet Domain Name System on an internet;

(e) at least one electronic processor and at least one computer for examination
and resolution of domain names;

(f) at least one storage media for storing said tables.

40. The system of claim 39 further comprising:
the Internet as the internet.

41. The system of claim 39 further comprising:
Unicode as the multi-language character set coding system.

42. A system based on at least one electronic processor and at least one
computer for mapping multi-lingual (non-English) UIDs to existing UIDs of
an internet network email system and for mapping existing UIDs of the Internet
email system to multi-lingual (non-English) ML-UIDs comprising:

- 375 (a) a table of English UID's with corresponding multi-lingual(non-English)
ML-UIDs;
- (b) a table of multi-lingual (non-English) ML-UIDs with corresponding
English UIDs;
- (c) resolution for an English-required UID portion of an internet, further
comprising:
- 380 (i) an incoming ML-UID or UID, examined to determine if it is an
English UID; wherein, if so, resolution of said English UID
directly by email UID resolution on an internet;
- (ii) the incoming ML-UID or UID, examined to determine if it is
a non-English multi-lingual ML-UID; wherein, if so, replacement
of said non-English ML-UID is by a known English ML-UID
which corresponds to the multi-lingual non-English ML-UID; and
wherein said English UID is used directly for email UID resolution
on an internet;
- 385 (d) resolution for an a non-English ML-UID required portion of an internet,
further comprising:
- 390 (iii) the incoming ML-UID or UID, examined to determine if it is
an non-English multi-lingual ML-UID; wherein, if so, said non-
English ML-UID is used directly for email ML-UID resolution on
an internet;
- (iv) the incoming ML-UID or UID, examined to determine if it is an
English UID; if so, replacement of said English UID is by a non-
English ML-UID which corresponds to the English UID; said non-
English ML-UID is used directly for email ML-UID resolution on
an internet.
- 395 (e) at least one electronic processor and at least one computer for examination
and resolution of domain names;
- 400 (f) at least one storage media for storing said tables.

43. The system of claim 42 further comprising:

the Internet as the internet.

405

44. The system of claims 42 further comprising:
Unicode as the multi-language character set coding system.

410

45. The system of claim 42 further comprising:
an identifying word (ML-word) in the ML-UID string for each language
character set; wherein said word is distinct for each different coding of the
same language character set.

415

46. A system based on at least one electronic processor and at least one
computer for mapping multi-lingual (non-English) ML-URL path names
to existing URL path names of an internet network system and for
mapping existing URL path names of an internet system to multi-lingual
(non-English) ML-URL path names comprising:

420

- (a) a table of multi-lingual (non-English) ML-URL path names
with corresponding English URL(ML-URL path name/URL path name
translation/mapping database);
(b) a table of English URL path names with corresponding multi-lingual (non-
English) ML-URL path names; (URL path name/ML-URL path name
translation/mapping database);
(c) resolution for an English-required URL portion of an internet, further

425

comprising :

430

- (i) an incoming ML-URL path name or URL path name, examined to
determine if it is an English URL path name; if so, utilization of
said English URL path name directly for URL path name
resolution on an internet;
(ii) the incoming ML-URL path name or URL path name, examined to
determine if it is a non-English multi-lingual ML-URL path name;
if so, replacing said non-English ML-URL path name by a known
English URL path name which corresponds to the multi-lingual

non-English ML-URL path name; and wherein said English URL path name is used directly for URL path name resolution on an internet;

(d) resolution for an a (non-English) multi-lingual ML-URL-required portion of an internet, further comprising:

(iii) the incoming ML-URL or URL path name, examined to determine if it is an non-English multi-lingual ML-URL path name; if so, utilizing said ML-URL path name for ML-URL path name resolution on an internet;

(iv) the incoming ML-URL or URL path name, examined to determine if it is an English URL path name; if so, replacement of said English URL path name by a non-English ML-URL path name which corresponds to the multi-lingual non-English ML-URL path name; and utilizing said non-English ML-URL path name is directly for path name resolution on an internet;

(e) at least one electronic processor and at least one computer for examination and resolution of domain names;

(f) at least storage media for storing said tables.

47. The system of claim 46 further comprising:
the Internet as the internet.

48. The system of claim 47 further comprising:
Unicode as the multi-language character set coding system.